

DUTY STATEMENT				PROPOSED	
Classification: Research Scientist II (Epidemiology/Biostatistics)			Position Number: 811-130-5582-xxx		
Branch/Section: Community and Environmental Epidemiology Research Branch/Community Assessment and Research Section					
Location: Sacramento/Oakland			Effective Date:		
Management Designation		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Conflict of Interest		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Supervision Received:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Supervision Exercised:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Pursuant to Government Code Section 3100-3109, all public employees are declared to be disaster service workers for the protection of the health and safety and preservation of the lives and property of the people of the state from the effects of natural, man-made, or war-caused emergencies which result in conditions of disaster or extreme peril to life, property, and resources. This is of paramount state importance in protection of its citizens and resources.

POSITION SUMMARY

The Community Assessment and Research Section (CARS) within the Community and Environmental Epidemiology Research Branch (CEERB) of the Office of Environmental Health Hazard Assessment (OEHHA) provides technical support for the identification of California communities burdened by multiple sources of pollution and population vulnerabilities through its mapping tool, the California Communities Environmental Health Screening Tool (CalEnviroScreen) and supports the identification of disadvantaged communities under Senate Bill 535 of 2012. CARS also provides technical assistance related to the evaluation of cumulative impacts to other programs in OEHHA, the California Environmental Protection Agency (CalEPA), and other California government entities.

Under general supervision of the Research Scientist Supervisor I (Epidemiology/Biostatistics), Chief of CARS, the Research Scientist (RS) II (Epidemiology/Biostatistics (E/B)) plans, organizes, and carries out research studies of moderate scientific scope and complexity to develop methods, analyze trends, and evaluate equity in the geographic distribution of data from CalEnviroScreen indicators over versions and time. The RS II (E/B) supports the development of metrics and analyses to evaluate changes over time and measure progress towards improving environmental conditions in disadvantaged communities. The RS II (E/B) serves as a team member in various public health-related projects and investigations to improve CalEnviroScreen as an environmental justice screening tool and to communicate its findings. The RS II (E/B) will perform the following duties and other related work:

ESSENTIAL FUNCTIONS

35% Trends analysis of CalEnviroScreen environmental health data

Conduct moderately complex statistical and spatial analyses of CalEnviroScreen indicators and other relevant related datasets using different versions of the tool to understand trends by time and place. Use statistical software (such as R or SAS) and geographic information systems (GIS) software (such as ArcGIS) to conduct the statistical and spatial trends analyses of CalEnviroScreen data. Perform moderately complex analyses of different types of change (e.g., absolute or relative) in individual indicators across California census tracts to assess trends over time. Assess the distribution of changes with respect to community-scale measures of equity (e.g., socioeconomic status or race/ethnicity) or region (e.g., county) to determine how conditions have changed. Characterize uncertainties in the trend analyses to indicate limitations in the methodologies used. Review indicator methodology throughout

I have read and understood the duties and essential functions of the position and can perform these duties with or without reasonable accommodation:	Date:
Employee Signature:	
I certify that the above accurately represent the duties of the position:	Date:
Supervisor Signature:	
PERSONNEL USE ONLY: This personnel action has been reviewed and approved by:	
Personnel Analyst Signature:	Date:

versions of CalEnviroScreen and, as needed, reanalyze historical data to ensure the least statistically biased results. Examine multiple CalEnviroScreen indicators in order to perform moderately complex analyses of cumulative trends.

20% Consultation and outreach on CalEnviroScreen trends analysis

Consult and collaborate with OEHHA staff, management and program staff from CalEPA Boards and Departments on tracking change, using CalEnviroScreen data to prioritize which indicators and measures of community disadvantage to analyze. Along with senior staff, in order to identify research priorities and the types of analyses to conduct, participate in consultations with external stakeholders including academics and community-based organizations with knowledge of how environmental data can be used to measure trends. Make presentations to CalEPA Boards and Departments and receive public input at workshops, webinars, or community meetings on the findings of trends analyses, as necessary. Identify and summarize proposed changes to the trends analysis based on internal and external comments. Assist with developing scopes of work for possible consultation contracts with external experts to supplement scientific bases for trend analysis.

15% Development of methodological approaches to evaluating trends

Review scientific literature and research statistical methods on approaches to track changes and measure trends in environmental, health and demographic data to gather information on best practices. Propose methodological approaches to analyze CalEnviroScreen indicator trends by time and place to section chief. Maintain a database of the identified bibliographic entries using a reference management software such as Endnote.

15% Prepare reports and data visualizations

Produce internal written summaries and draft presentations of statistical and spatial analyses describing the changes in conditions by individual and cumulative indicators for periodic review by senior section staff and supervisor. Based on feedback from OEHHA reviewers, prepare preliminary reports, data visualizations including interactive maps, as well as presentations for the public for review and approval by senior scientific staff.

5% Develop project workplan

Develop part of a project workplan on the CalEnviroScreen indicator trends analysis by incorporating information such as the number of indicators that can be evaluated each year and a projected timeline. Update the work plan yearly based on initial trends analyses and based on input from senior CARS staff, supervisor, and stakeholders.

MARGINAL FUNCTIONS

- 5%** Assist CARS staff and other collaborators in the preparation of manuscript drafts for publication in scientific journals that relate to analyses of CalEnviroScreen indicators trends by time and place through conducting the literature review and drafting the methods and results sections.
- 5%** Attend relevant scientific meetings and conferences at the local and national level and make presentations where appropriate. Attend continuing education courses to maintain and further develop technical skills and expertise.

REQUIRED QUALIFICATIONS

- Proficiency in principles epidemiology, biostatistics, and an understanding of the general principles of public health, particularly as it relates to cumulative pollution exposures and environmental justice concepts.
- Ability to serve as a team member on scientific projects and to make recommendations in area of expertise.
- Knowledge and proficiency with statistical software (such as R or SAS) and GIS software (such as ArcGIS).

- Proficiency in critically evaluating research studies in the fields of environmental health and epidemiology for application of issues of public health.
- Ability to produce high quality work products that clearly and concisely convey scientific findings and concepts.

DESIRED QUALIFICATIONS

- Ability to communicate effectively verbally and in writing.
- Familiarity or experience with a reference management system such as Endnote.
- Ability to work cooperatively with internal staff, supervisors and managers, outside agencies, academic researchers, and community.

WORKING CONDITIONS

- OEHHA has a hybrid work environment that includes work in an office setting in a high-rise building and telework at home.
- Office arranged in cubicles, not all of which have direct natural illumination.
- Time critical assignments are part of the workload.
- Prolonged sitting while reviewing scientific articles, reports and generating scientific documents and reports is required.
- Repetitive motion in using office equipment occurs.
- Travel to off-site meetings may be required as necessary.
- Participation in teleconferences and webinars is required.
- May be required to travel to other OEHHA locations for business related needs as necessary.